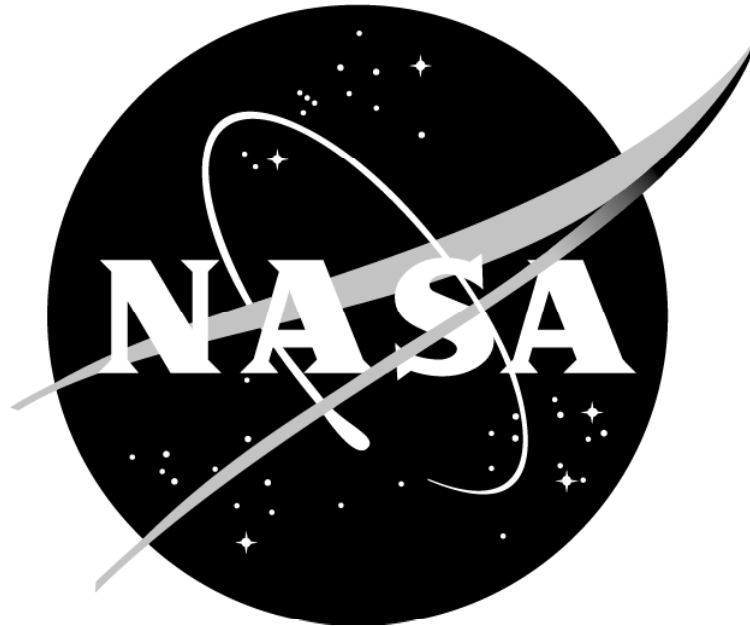


Responsible Office: Code AE/ Office of the Chief Engineer  
**Subject:** Manage Programs & Budget



**Chief Engineer**

**Office Work Instruction**

**Manage Programs & Budget**

Original Approved by: Mr. W. Brian Keegan, Chief Engineer

Responsible Office: Code AE/ Office of the Chief Engineer  
**Subject:** Manage Programs & Budget

## DOCUMENT HISTORY LOG

<u>Status</u> <u>(Baseline/</u> <u>Revision/</u> <u>Canceled)</u>	<u>Document</u> <u>Revision</u>	<u>Effective</u> <u>Date</u>	<u>Description</u>
Baseline		12/10/99	
Revision	a	9/11/00	Modified flowcharts and narratives to enhance clarity (no substantive changes). Added a definition. Added "Action Status Tracking" quality record. Changed flowchart symbology to align with recommendations in HCP 1400-1. Modified flow of flow 6.a (Budget Formulation) to insert Headquarters review of proposed program and adjustment on guidelines as required before Center submittal to IPO's

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## **1.0 Purpose**

The purpose of this procedure is to document the process used by the Office of the Chief Engineer (Code AE) to manage the programs & budgets controlled by the Chief Engineer.

## **2.0 Scope and Applicability**

### **2.1 Scope**

This is the process used by Code AE to manage the programs & budget controlled by the Chief Engineer. Included in this OWI are procedures to formulate and implement budgets, and perform program planning and evaluation.

This process is controlled by Code AE. Included are the following sub-processes:

- a. Budget Formulation
- b. Budget Implementation
- c. Program Planning and Evaluation

### **2.2 Applicability**

This OWI applies to Code AE.

## **3.0 Definitions**

- 3.1 AOP. Annual Operating Plan – Planned obligations/costs by month by Center
- 3.2 NF 506. Resources Authority Warrant (“506 green”) from Comptroller
- 3.3 NF 506A. Resources Authority Warrant (“506 white”) to Centers
- 3.4 CIC. Capital Investment Council
- 3.5 FACS. Monthly Financial and Contractual Status report (Code B)
- 3.6 IPO. Institutional Program Office
- 3.7 OMB. Office of Management and Budget
- 3.8 AE PFP. Program Financial Plan for Code AE
- 3.9 POP. Program Operating Plan

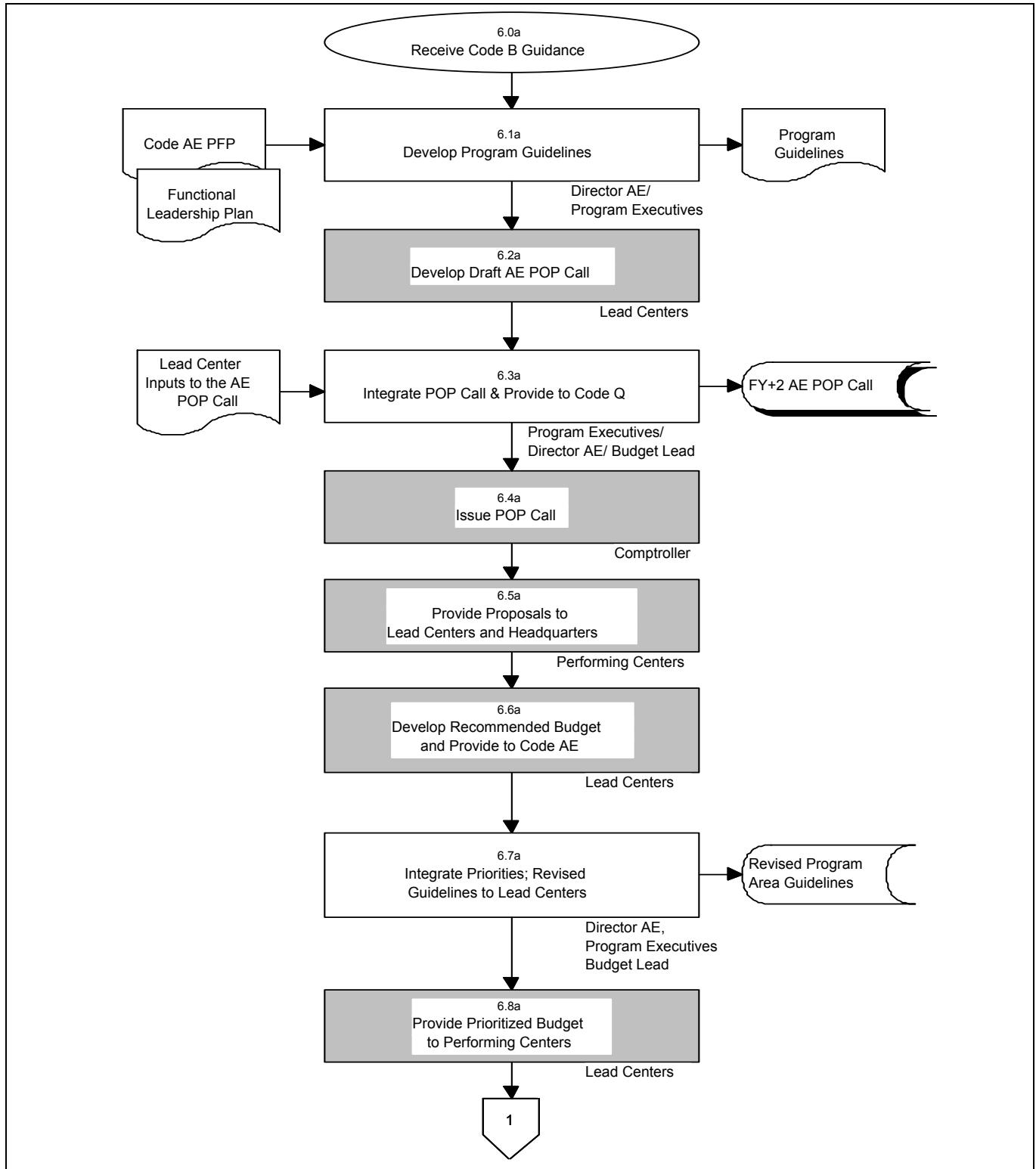
## **4.0 References**

- NPG 1000.2 NASA Strategic Management Handbook
- NPG 7120.5 Program and Project Management Handbook

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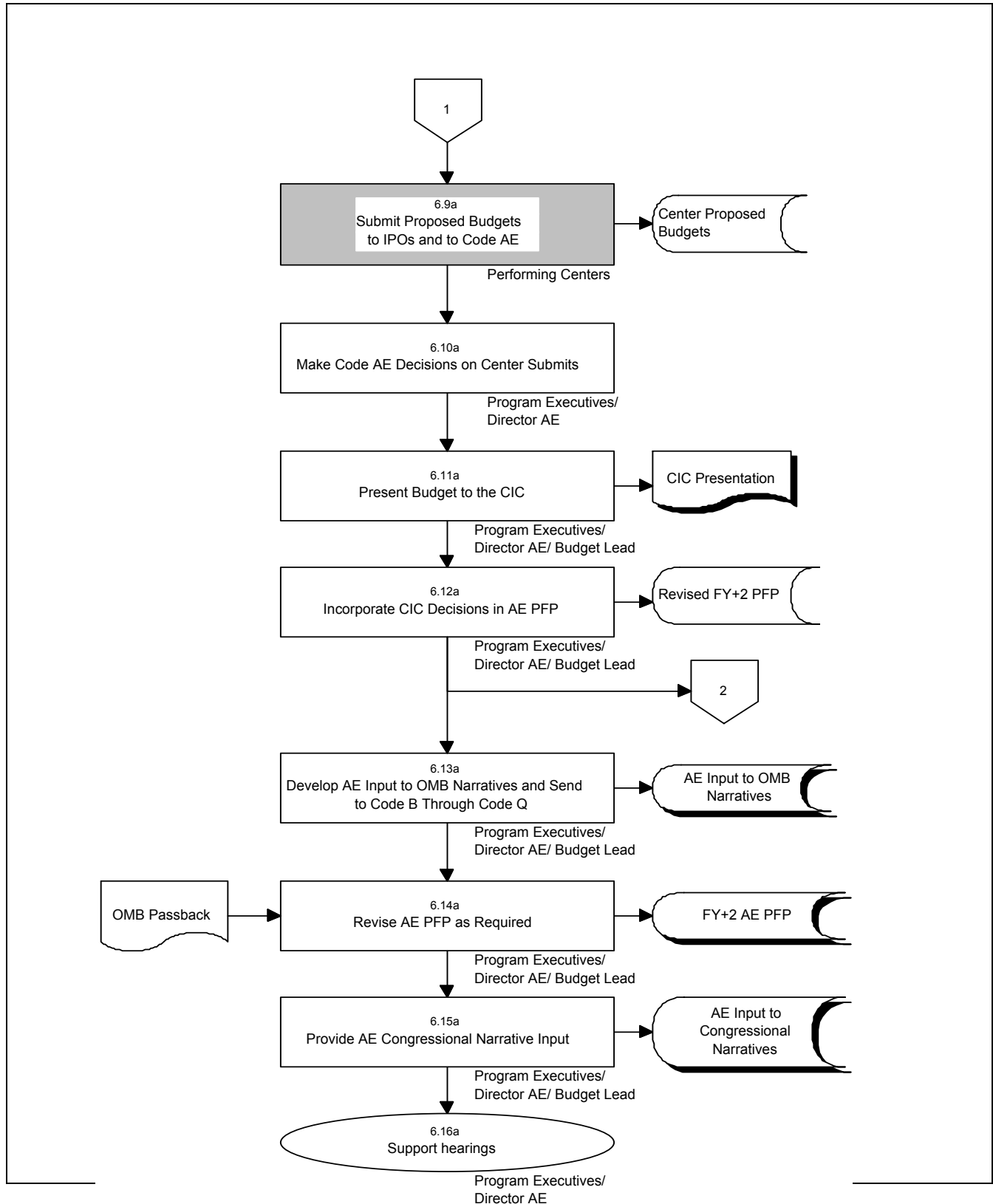
## 5.0 Flowchart

### (a) Budget Formulation



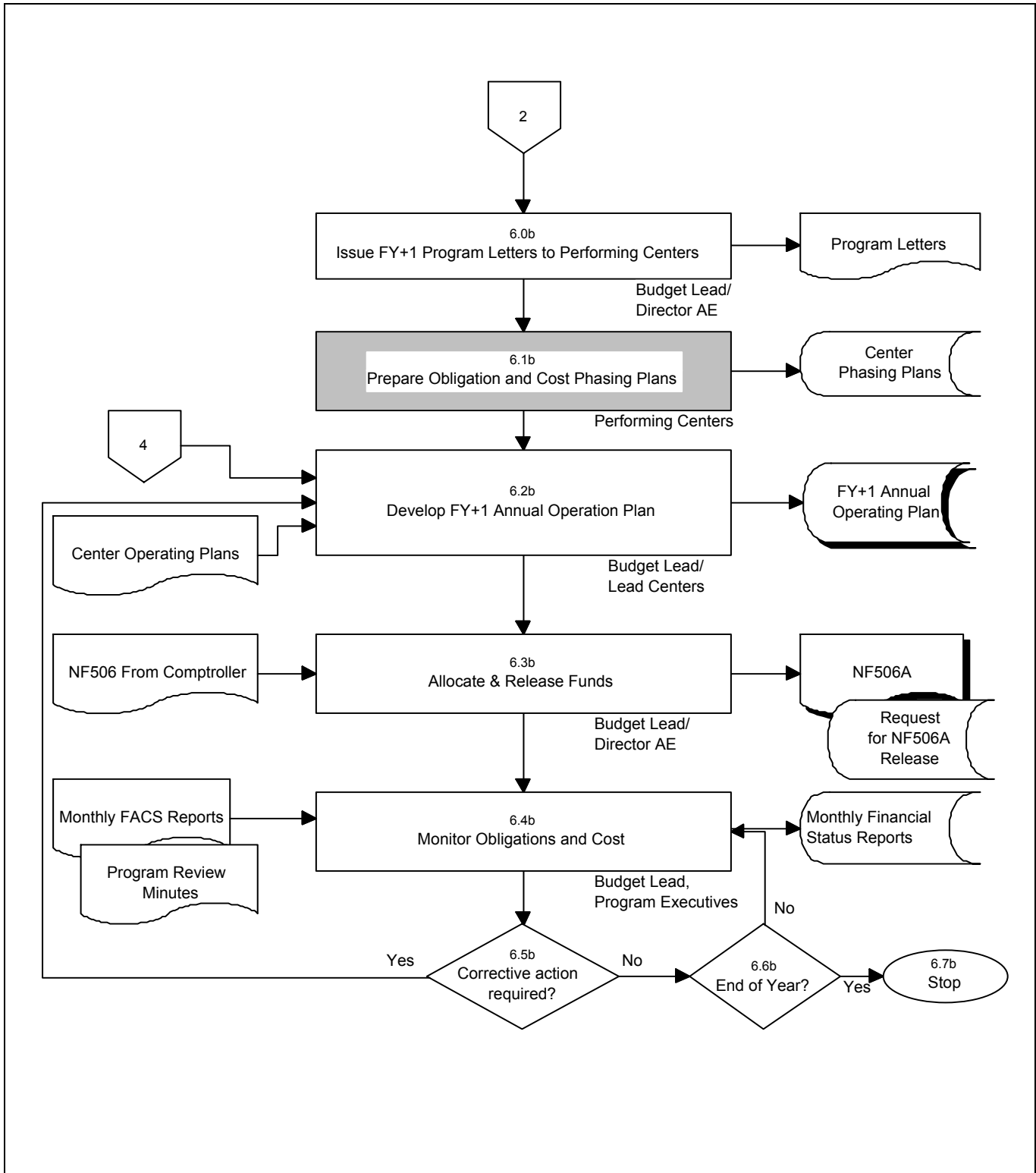
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(a) Budget Formulation - continued



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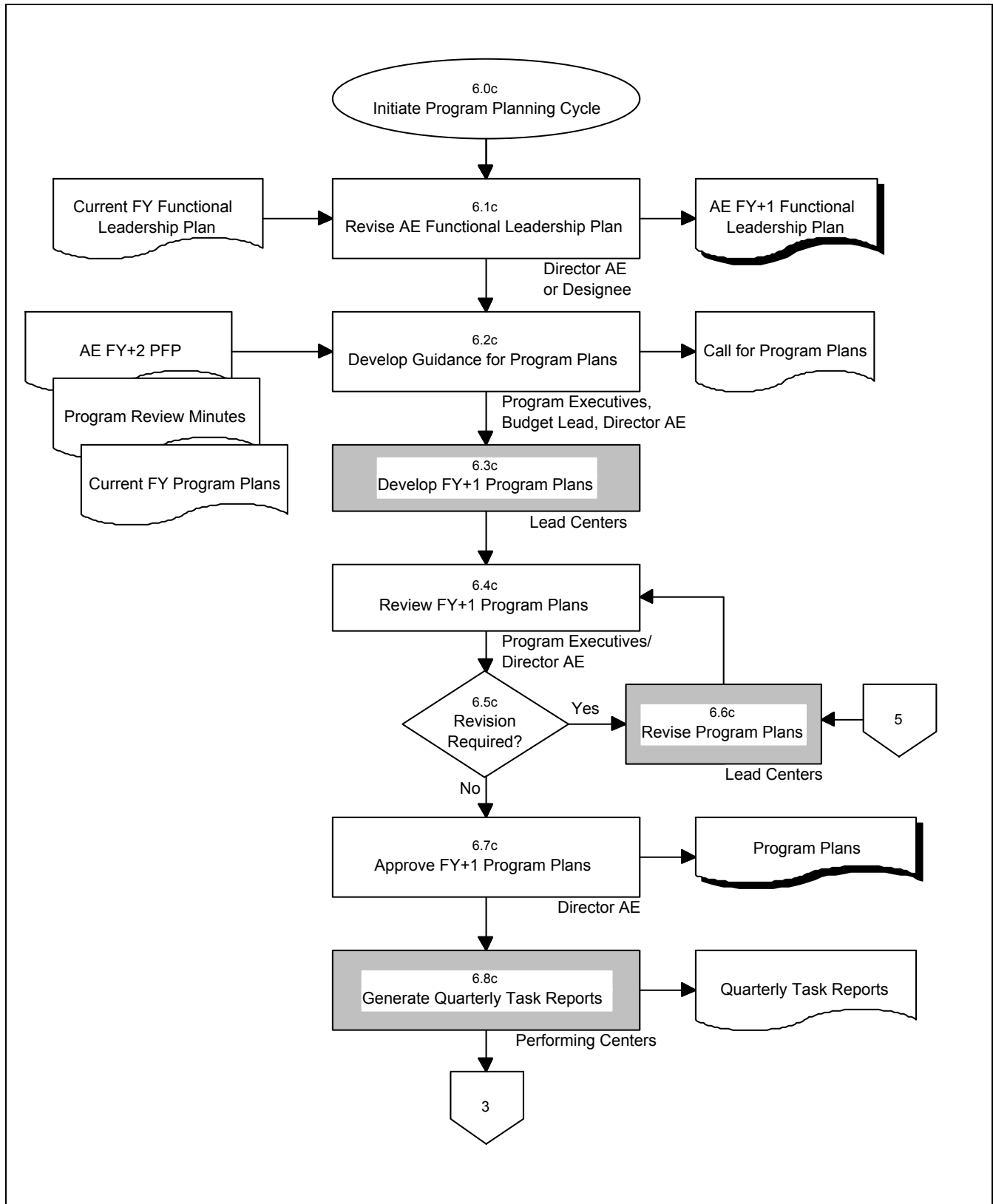
## (b) Budget Implementation



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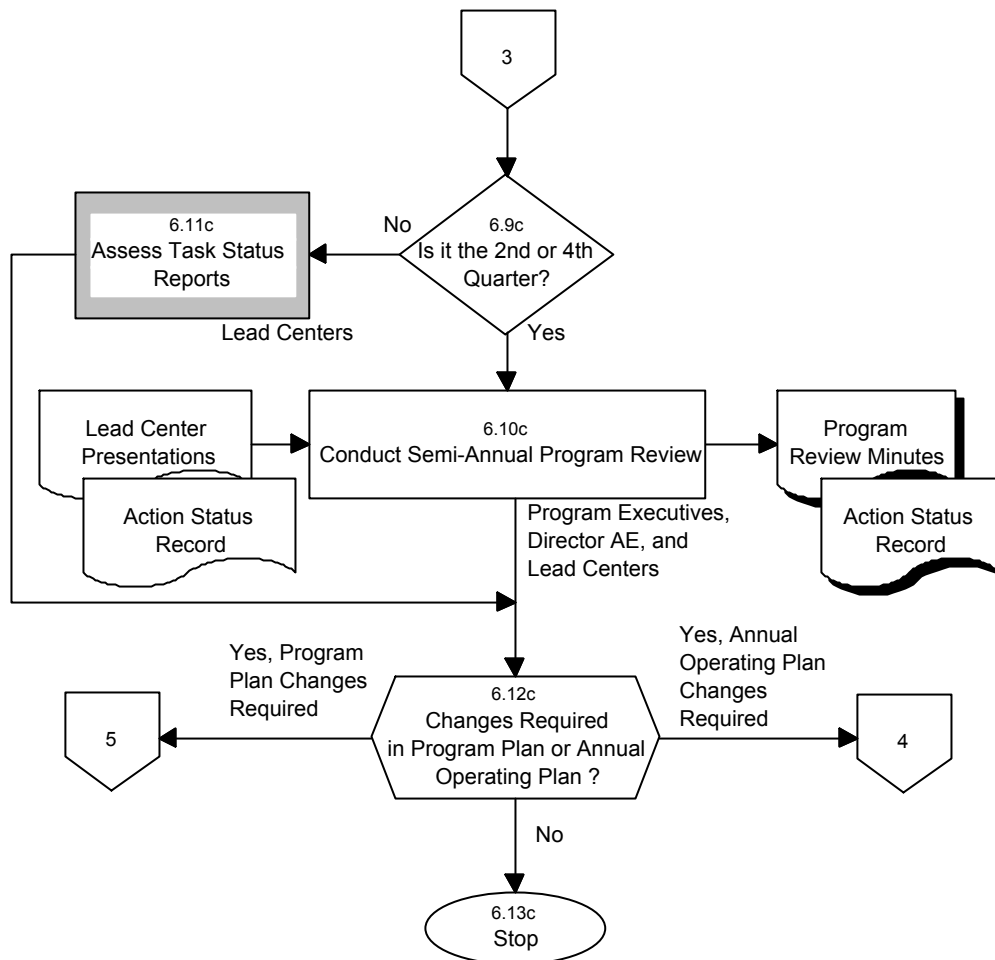
### (c) Program Planning & Evaluation



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(c) Program Planning & Evaluation - continued





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## 6.0 Procedure

### (a) Budget Formulation

<u>Step</u>	<u>Actionee</u>	<u>Action</u>
6.0a		Comptroller issues guidance for development of budget estimates.
6.1a	Director AE/ Program Executives	Develop Program Guidelines on potential initiatives, priorities, and proposed changes based on previous AE PFP and the AE Functional Leadership Plan resulting from 6.1c; provide guidelines electronically to Program Lead Centers.
6.2a	Lead Centers	Recommend future program content, and areas of emphasis in a proposed POP Call; provide electronically for review by Code AE.
6.3a	Program Executives/ Budget Lead/ Director AE	Review, revise and integrate Lead Center inputs into a consolidated FY+2 AE POP Call. The POP Call is approved by the Director AE who sends it electronically to Code Q for integration and transmission to the Comptroller.
6.4a	Comptroller	Comptroller integrates Code AE POP Call into NASA POP call for FY+2 to FY+6 and issues to IPOs (Institutional Program Offices) and Centers.
6.5a	Performing Centers	Performing Centers provide proposals to Lead Centers in each Program Area for evaluation and to Headquarters for coordination.
6.6a	Lead Centers	Lead Centers evaluate proposals, prioritize inputs, develop a recommended budget and justification for each Program Area, and present to Headquarters Code AE.
6.7a	Director AE, Program Executives, Budget Lead	Review Lead Center recommendations, integrate priorities, revise program area guidelines as required, and provide electronically to Lead Centers.
6.8a	Lead Centers	Provide prioritized budget for each program area to Performing Centers for inclusion in the Center budget submit to IPOs.
6.9a	Performing Centers	Submit requested budgets to the Comptroller through IPOs as part of integrated Center budget, and electronically to Headquarters, Code AE
6.10a	Program Executives, Director AE	Program Executives review Center POP responses, make recommendations for approval of the proposed budget by the Director AE
6.11a	Program Executives, Budget Lead, Director AE	The Budget Lead, in cooperation with the Program Executives, prepares an integrated budget presentation for approval by the Director, AE and presentation to the CIC (Capital Investment Council),
6.12a	Program Executives, Budget Lead, Director AE	Incorporate decisions on budget adjustments from the CIC and Administrator into a revised FY+2 PFP, which is approved electronically by the Director AE. The revised FY+2 PFP provides final guidance for the Budget Implementation Process for FY+1 and interim planning budgets for FY+2 to FY+6.

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- |       |  |  |
|-------|--|--|
| 6.13a | Program Executives, Budget Lead, Director AE | The Budget Lead prepares AE Input to OMB Narratives based on Lead Center Budget Justification materials in coordination with the Program Executives, for approval by the Director AE. Provide approved narratives with e-mail approval by the Director AE electronically to Code Q for integration and transmission to the Comptroller as the Code AE input to the OMB Budget Justification Narrative for FY+2. This process is separate from but coordinated with development and transmission of the PAPAC input to the Performance Plan from HQOWI_7120-AE003, "Lead and Manage PAPAC Process", |
| 6.14a | Program Executives, Budget Lead, Director AE | Revise the FY+2 PFP from 6.10a as required by the OMB Passback; the Final FY+2 PFP (Quality Record) is approved electronically by the Director AE, and is used as the basic planning document for FY+2 to FY+6 Program Plans   |
| 6.15a | Budget Lead, Program Executives, Director AE | Modify AE Input to the OMB Narratives as required by the OMB Passback to develop the Code AE Input to the Congressional Narratives; this input is developed by the Budget Lead in coordination with the Program Executives, approved by the Director AE, and provided electronically to Code Q, with e-mail concurrence, for integration and transmission to the Comptroller.  |
| 6.16a | Program Executives, Director AE              | Support Congressional Authorization and Appropriation Hearings as required with supplementary information developed by the Program Executives for hardcopy transmission by the Director AE.  |

## (b) Budget Implementation

- | <u>Step</u> | <u>Actionee</u>                 | <u>Action</u>  |
|-------------|---------------------------------|--|
| 6.0b        | Budget Lead, Director AE        | Decisions for FY+1 are documented in Program Letters from the Director AE to each Center identifying FY+1 guidelines for tasks in each Program Area and requesting Center Phasing Plans for total Obligations/Costs by month.  |
| 6.1b        | Performing Centers              | Performing Centers develop FY+1 Phasing Plans and provide them electronically to the Lead Centers and to Headquarters as requested in the Program Letters.   |
| 6.2b        | Budget Lead/ Lead Centers       | The Budget Lead integrates Center Phasing Plans to provide a consolidated FY+1 Annual Operating Plan (AOP) for Code AE which is maintained electronically. The Annual Operating Plan is revised as required by actions from 6.5b, and approved electronically by the Director AE. Lead Centers will maintain Annual Operating Plans for Each Program Area. Individual Centers are responsible for ensuring that allocation of distributed funds within the Center meets task needs across Program Areas.                         |
| 6.3b        | Budget Lead/ Director AE        | The Comptroller provides incremental budget authority, NF506 ("506 Green"), consistent with Appropriation authority from the Congress and release of funds by the Office of Management and Budget. Code Q will issue hard-copy NF506A ("506 white") authorization to Performing Centers to support phasing plans as requested electronically by the AE Budget Lead and signed by the Director AE. Forms are mailed to Performing Centers who must optimize allocations within available authority, to meet Center Phasing Plans. |
| 6.4b        | Budget Lead, Program Executives | Monitor actual obligations and costing against individual Center Phasing Plans based on FACS reports to produce Monthly Financial Status Reports. Code AE maintains (electronically) an integrated Monthly Financial Status Report for THE CODE AE BUDGET based on the monthly FACS Report from the Comptroller. The Lead Centers will monitor obligation and cost performance in their respective   |

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<u>Step</u>	<u>Actionee</u>	<u>Action</u>
		Program Areas and report at least quarterly.
6.5b	Budget Lead, Program Executives, Lead Centers	Determine the need for revising the AOP based on significant deviations from Center Phasing Plans, Program Review decisions (6.10c), or changed priorities.
6.6b		If no corrective action is needed, monitoring continues (6.4b).
6.7b		At the end of the Fiscal Year, the process stops ; unused funding (carryover) continues to be monitored the following year

### (c) Program Planning & Evaluation

<u>Step</u>	<u>Actionee</u>	<u>Action</u>
6.0c		Establishing the FY+2 AE PFP provides a baseline for initiating Program Planning for the next budget cycle. Program Plans are required for the areas of Technical Standards, Systems Engineering, Design, Analysis, Test and Verification, Independent Program Assessment Office and Electronic Parts and Packaging.
6.1c	Director AE, or Designee	The existing Code AE Functional Leadership Plan is updated as directed by the Director AE or designee in coordination with the Program Executives and approved/signed by the Director AE. The signed Plan is retained in Code AE files. The resulting FY+1 AE Functional Leadership Plan meets the requirements of NPG7120.5, and implements the Provide Aerospace Products and Capabilities Crosscutting Process defined in the NASA Strategic Management Handbook (NPG 1000.2).
6.2c	Program Executives, Budget Lead, Director AE	Program Executives develop overall budget and content guidance for each Program Area consistent with the AE PFP from the previous Program Plan, the AE Functional Leadership Plan, changes in priorities, and decisions documented in Program Review Minutes (hard copy) from the Semi-Annual Program Review. The guidance is integrated by the Budget Lead and approved by Director, Code AE into a call letter (hard copy) for Program Plans issued to the Lead Centers.
6.3c	Lead Centers	Lead Centers develop Draft FY+1 Program Plans, in conjunction with Performing Centers, consistent with guidance included in the Call for Program Plans; supplementary initiatives may be proposed for FY+3 and beyond. Plans shall conform to the requirements of NPG 7120.5, including specification of performance goals and performance indicators, except where deviations are authorized by the Director AE.
6.4c	Program Executives, Director AE	Program Executives review and recommend necessary changes, where necessary for preliminary review of the Program Area Plans by the Director AE. Required changes to Program Plans may also result from the semi-annual Program Reviews in 6.110c.
6.5c	Program Executives,	If revision is required, the Director AE transmits the request for required change to the Lead Centers.

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<u>Step</u>	<u>Actionee</u>	<u>Action</u>
	Director AE	to the Lead Centers.
6.6c	Lead Centers	Lead Centers revise Program Plans as required.
6.7c	Director AE	The Director AE approves/signs Program Plans when no further changes are required. Hard copies of Plans are retained in Code AE files.
6.8c	Performing Centers	Performing Centers develop Quarterly Task Status Reports on each funded task providing information on accomplishments (against plans), financial status, and identifying issues requiring action. The Performing Centers provide reports to the appropriate Lead Center for evaluation and to Headquarters for information.
6.9c	Performing Centers	Performing Center Quarterly Reports for the 2 <sup>nd</sup> and 4 <sup>th</sup> Quarters provide inputs to Lead Center reports for a Semi-Annual Program Review. In the 1 <sup>st</sup> and 3 <sup>rd</sup> Quarters, assessment is performed by the Lead Centers.
6.10c	Program Executives, Director AE, and Lead Centers	A Semi-Annual Program Review will be held with the Program Executives and the chaired by the Director AE, generally following the 2 <sup>nd</sup> and 4 <sup>th</sup> Quarters. Lead Centers present Program Status and recommend corrective action as required. Necessary actions approved by the Director AE will be documented in the Performance Review Minutes. An Action Status Record is maintained electronically and tracked by the Budget Lead. Actions are reviewed at meetings of the Engineering Management Council.
6.11c	Lead Centers	Lead Centers assess Task Status Reports for the 1 <sup>st</sup> and 3 <sup>rd</sup> Quarters and identify issues requiring action by AE.
6.12c	Program Executives, Director AE	If changes are required, they can involve both the Program Plans and the Annual Operating Plans. Operating Plan changes are made at 6.2b. Program Plan Changes are made at 6.6c.
6.13c		If no modification of Program Plans is required, the process stops pending future input. End process.

## 7.0 Quality Records

<u>Record ID</u>	<u>Owner</u>	<u>Location</u>	<u>Record Media</u>	<u>NPG 1441.1 Schedule and Item Number</u>	<u>Retention/Disposition</u>
FY+2 AE POP Call	Code AE	HQ Network AE folder	Electronic	Schedule 7, Item 21 F	Destroy 1 year after the close of the fiscal year covered by the budget.
CIC Presentation	Code AE	HQ Network AE folder	Electronic	Schedule 7, Item 21 F	Destroy 1 year after the close of the fiscal year covered by the budget.
AE Input to OMB Narratives	Code AE	HQ Network AE folder	Electronic	Schedule 7, Item 21F	Destroy 1 year after the close of the fiscal year covered by the budget.
FY+2 AE PFP	Code AE	HQ Network AE folder	Electronic	Schedule 7, Item 21 D1	Destroy 2 years after the close of the fiscal year.
AE Input to Congressional	Code AE	HQ Network	Electronic	Schedule 7, Item 21F	Destroy 1 year after the close of the fiscal year covered by

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<u>Record ID</u>	<u>Owner</u>	<u>Location</u>	<u>Record Media</u>	<u>NPG 1441.1 Schedule and Item Number</u>	<u>Retention/Disposition</u>
Narratives		AE folder			the budget.
FY+1 Annual Operating Plan	Code AE	Code AE Files	Hardcopy	Schedule 7, Item 22	Destroy when 5 years old.
NF506A	Code AE	Code AE Files	Hardcopy	Schedule 7, Item 21D1	Destroy 2 years after the close of the fiscal year.
AE FY+1 Functional Leadership Plan	Code AE	Code AE Files	Hardcopy	Schedule 7, Item 4C	Destroy 2 years after succession
Program Plans	Code AE	Code AE Files	Hardcopy	Schedule 7, Item 21D1	Destroy 2 years after the close of the fiscal year covered by the budget Fiscal Year.
Program Review Minutes	Code AE	Code AE Files	Hardcopy	Schedule 7, Item 21F	Destroy 1 year after the close of the fiscal year covered by the budget.
Action Item Status Record	Code AE	HQ Network AE Folder	Electronic	Schedule 7, Item 21F	Destroy 1 year after the close of the fiscal year covered by the budget.